

AUG.5.1980 CALGARY ALBERTA

DEAR ROBERT

AS YOU CAN SEE I FINALLY GOT A TYPEWRITER.

AS PROMISED EARLIER THIS YEAR I HAVE CALLED ALL NUMBERS FROM 0 to 32767 A LIST OF THE BEST ONES IS ENCLOSED. THE ONES THAT ARE NOT INCLUDED ARE ONES THAT RESET, LOCK, SHOW NOTHING ON THE SCREEN AND THE ONES THAT ARE RESETS, LOCKS THAT ARE REPEATS.

I HOPE I HAVE NOT MADE TO MANY SPELLING MISTAKES AS I AM GERMAN AND MY ENGLISH IS SELF TAUGHT.

I HAVE ALSO INCLUDED A TABLE OF CONTENTS FROM A BALLY BOOKLET, SOME-ONE LET ME COPY, TOTALING 63 PAGES. I DID NOT SEND A WHOLE COPY AS YOU MIGHT HAVE IT ALREDDY.

IF YOU WOULD LIKE A COPY, STAPLE A NOTE TO MY NEXT NEWSLETTER OR WRITE YES OR NO ON THE NEWSLETTER AND IF YES I WILL SEND YOU A COPY.

SO TILL THEN

MAY ARCADIANS PROSPER

YOURS TRULY



DIETER HEINERMANN

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MIDWAY CUSTOM CIRCUITS		

ALL NUMBERS WHERE CALLED WITH(),WITHOUT(),WITH&(9)=5,WITH 10 INPUT A  
20 CALL A AND A PROGRAM THAT APEARS BELOW.

```

5 INPUT A
10 NT=1
20 BC=9;FC=7
30 &(9)=5
40 &(0)=96
50 &(1)=205
60 &(2)=130
70 &(3)=169
80 CLEAR
90 A=A+1;B=A;GOSUB 110
100 GOTO 90
110 CX=0;CY=30;PRINTB;CALLB;STOP;RETURN

```

#### EXPLANATION TO ABBREVIATIONS

WBB =WHAT? BALLY BASIC

BTBB =BACK TO BALLY BASIC

G =GOOD(CRUSOR APEARS ON NEXT LINE OR AFTER PRINTED MATERIAL)

LOCK =LOCKED KEYBOARD CAN NOT RETURN TO BASIC

IF YOU DECIDE TO USE ANY GOOD CALLS,TRY THEM FIRST WITH A SHORT  
PROGRAM.MAKE SURE THEY WILL WORK WITHOUT CHANGING THE PROGRAM  
THAT YOU HAVE WRITTEN.

SOME CALLS THAT WILL NOT WORK WITH YOUR PROGRAM CAN BE CALLED  
FIRST,THEN CLEARD (NOT RESET),THEN MAKE &(9)=0 AND WHATEVER  
WAS CALLED WILL REAPPEAR.

#### NOTE 1

WAIT FOR A FEW SECONDS THEN WBB SHOULD APEAR IF NOT CALL SAME  
NUMBER AGAIN.YOU WILL SEE A MEMORY DISPLAY ON TOP OF THE SCREEN  
THEN IT WILL PRINT WBB.PRESS WORDS GO WATCH MEMORY DISPLAY.  
NOW PUT IN PRINT"1111 WORDS GO.NOW LIST.TRY LIST AFTER WBB APEARS.

I HOPE YOU WILL FIND SOMETHING OF INTREST OR USE TO YOU IN YOUR  
PROGRAMS.SO HAPPY HUNTING.

463	red	flash	G
465	blue	"	G
466	red	"	G
467	"	"	G
468	"	"	G
469	"	"	G
470	green	"	G
471	yellow	"	G
472	red	"	G
625	interesting	memory display	LOCK
(975)	&(9)=10		G
1288	sound		G
1290	"		G
1294	"		G
1299	"		G
1302	"		G
1306	"		G
1307	"		G
1308	"		G
1309	"		G
1310	"		G
1315	"		G
1316	"		G
1318	"		G
1319	"		G
1370	"		G
1374	"		G
1376	"		G
1378	"		G
1381	"		G
1387	"		G
1389	"		G
1394	"		G
1397	"		G
1400	"		G

1402	sound	G	
1403	"	G	
1413	"	G	
1414	"	G	
1426	"	G	
1428	crasy print	WBB	
1429	"	"	WBB
1430	"	"	WBB
1432	sound	G	
1433	crasy print	WBB	
1434	sound	G	
1435	"	G	
1436	"	G	
1437	"	G	
1438	"	G	
1439	"	G	
1459	crasy print	WBB	
1460	sound	G	
1461	"	G	
1468	"	G	
1469	"	G	
1470	"	G	
1472	crasy numbers	if kp	WBB
1475	sound	G	
1476	"	G	
1478	crasy print	WBB	
1480	sound	G	
1481	"	G	
1482	"	G	
1483	"	G	
1485	"	G	
1486	"	G	
1495	"	G	
1496	"	G	
1500	"	G	

1502	sound	G
1503	"	G
1504	"	G
1505	"	G
1533	"	G
1535	"	G
1536	"	G
1539	"	G
1734	crasy characters	G
1739	"	G
1740	"	G
1742	"	G
1743	"	G
1744	"	G
1745	"	G
1746	"	G
1749	"	G
1751	"	G
1752	"	G
1753	"	G
1754	"	G
1756	"	G
1757	"	G
1758	"	G
1759	"	G
1760	"	G
1761	"	G
1814	interesting display	lock
1959	crasy print	WBB
2193	calculator +sound	G
3137	game over	lock
3172	menu	G
3174	"	G with 10input A 20callA
3177	"	G

```

3195 menu green background if kp reset
3196 " " " " " "
3197 " " " " " "
3198 " " " " " "
3199 " " " " " "
3200 " " " " " "
3207 menu black+white " "
3233 giant 1 lock
3327 enter xs 2&n lock
3328 " " " lock
3424 game over lock
3609 enter # of players if kp reset
3610 part of scribbling collar keys operate if kp reset
3611 " " " " " " " "
3612 " " " " " " " "
3813 crasy print WBB
3821 blue screen lock
3851 puts a box on screen WBB
3852 " " " " " " WBB
3853 " " " " " " WBB
3854 " " " " " " WBB
3859 " " " " " " G
3861 " " " " " " G
3862 " " " " " " G
3863 " " " " " " G
3865 " " " " " " G
3866 " " " " " " G
3869 " " " " " " G
3870 " " " " " " G
3982 wagon cactus cowboy G with 10input A 20call A
4128 calculator G
4138 varies &(9) WBB
4161 " " " WBB
4164 " " " WBB
4630 scroll screen up WBB

```

4659	move up one line	WBB
4671	down one line	WBB
4672	" " "	WBB
4673	up one line	WBB
4685	scroll screen up	WBB
4692	" " " "	WBB
4693	" " " "	WBB
4705	down one line	WBB
4706	" " "	WBB
4709	scroll down interesting display	WBB
4710	" " " " "	WBB
4908	checkmate computer self	G
4909	" " " " "	G
4910	" " " " "	G
4911	" " " " "	G
4912	" " " " "	G
4915	" " " " "	G
4916	" " " " "	G
4917	" " " " "	G
4918	" " " " "	G
4919	" " " " "	G
4920	" " " " "	G
4921	" " " " "	G
4922	" " " " "	G
4923	" " " " "	G
4924	" " " " "	G
4925	" " " " "	G
4928	" " " " "	G
4929	" " " " "	G but starts with black+white
4933	checkmate put in your own collar	LOCK no game
4934	" " " " " " "	LOCK " "
4935	" " " " " " "	LOCK " "
4980	" " " " " " "	LOCK " "
5008	" " " " " " "	LOCK " " HORIZONTAL BARRS CONTROL WITH KEYBOARD UP OR DOWN AND SPEED

5258	&(9) solid	WBB
5261	" " "	WBB
5264	sound	G
5265	"	G
5266	"	G
5271	"	G
5274	"	G
5277	"	G
5278	"	G
5279	"	G
5281	"	G
5282	"	G
5283	"	G
5286	"	G
5287	"	G
5291	"	G
5300	crash+crasy print	WBB
5307	" " " "	WBB
5308	" " " "	WBB
5309	" " " "	WBB
5310	" " " "	WBB
5311	" " " "	WBB
5327	" " " "	WBB
5329	" " " "	WBB
5335	" " " "	WBB
5337	" " " "	WBB
5345	collor+sound+crasy print if cruser touch bottom	LOCK
5350	" " " " " " " " " "	LOCK
5359	" " " " " " " " " "	LOCK
5360	" " " " " " " " " "	LOCK
5367	crasy print sound	WBB
5368	" " " " "	WBB
5369	" " " " "	WBB
5370	" " " " "	WBB
5388	" " " " "	WBB

5389	crasy print sound	WBB
5390	" " " "	WBB
5391	" " " "	WBB
5393	" " " "	G
5394	" " " "	G
5398	" " " "	G
5399	" " " "	G
5400	" " " "	G
5401	" " " "	G
5402	" " " "	G
5403	" " " "	G
5406	sound G	
5407	" G	
5409	" G	
5431	crash collor flashing	WBB
5433	" " " "	WBB
5434	collor flashing (rnd) sound crasy print	WBB
5438	" " " " "	BTBB
5440	" " " " "	BTBB
5441	" " " " "	BTBB
5548	large numbers in left top corner	LOCK
5552	" " " " " "	LOCK
5561	" " " " " "	LOCK
5571	" " " " " "	LOCK
5585	checkmate computer self	
5589	" " " " "	
5590	" " " " "	
5591	" " " " "	
5592	" " " " "	
5593	" " " " "	
5662	crasy print	WBB
5678	" " "	WBB
5679	" " "	WBB
5697	" " "	WBB

```

5700      crasy print          G
6047      enter xs 2&n        LOCK
(6106)    gunflight after sound enter max score &(9)must=less them 1  G
6357      crasy print          G
6374      "   "   "           G
6380      "   "   "           G
6381      "   "   "           G
6382      "   "   "           G
6385      "   "   "           G
6456      got me               WBB
6464      "   "               WBB
6467      "   "               WBB
6478      "   "               WBB
6480      "   "               WBB
6485      "   "               WBB
6492      "   "               WBB
6536      cactus+tree         G      with() tree       G
6539      tree+memory         G      "   "   "         G
6545      "   "               G      with () tree     G
6546      pattern right side   G
6548      tree+memory         G      with () tree     G
6549      pattern right side   G      with () tree+memory G
6550      "   "   "   "       G      "   "   "   "   "   G
(6554)    tree                G      10 inputA 20 callA change position G mo()lock
(6555)    "                   G      "   "   "   "   "   "   "   G "   "   "
6556      " + memorytop       G      with () tree memory center  G
6559      "   "   "           G      "   "   "   "   "   "   G
6560      treetop at -40 memory center G      with() 2 trees G
6561      tree + memory top    G      with () tree memory center G
6562      tree                 WBB      with () memory tree       LOCK
6566      tree+ memory top    G      with() tree memory center  G
(6567)    tree                G
6568      tree + memory top    G      with() tree+memory center  G
6569      "   "   "   "       G      "   "   "   "   "   "   G
6575      tree                G      with () change position and number oftrees G

```

```

6579 2trees      G  with () 1tree      G
6580 " "        G  " " " "          G
6581 top of tree G  " " " "          G
6582 2trees      G  with () 1tree      G
6583 "          G  " " " "          G
6584 "          G  " " " "          G
6596 memory top  G  with () memory center G
6598 " "        G  " " " "          G
6638 1 game gunfight G
6639 " "        G
6670 gunfight not working add own collar BTBB
6819 box with cactus BTBB
6820 " no "      BTBB
6827 gravestones LOCK
6830 " "        LOCK
6831 " "        LOCK
6892 &(10) up sound WBB
6893 " " "      WBB
6894 " " "      WBB
6895 " " "      WBB
6896 " " "      WBB
6900 " " "      WBB
6975 bc change to blue WBB
7063 bc+fc change to orange WBB with () bc=7 fc=1 WBB
8497 same as :INPUT G
8499 " " "      G
8500 " " "      G
8501 " " "      G
8502 " " "      G
8503 " " "      G
8504 " " "      G
8505 " " "      G
8506 " " "      G
8507 " " "      G

```

```

8508 same as :PRINT      G
8525 crusror gone if kp  BTBB
8526 " " " BTBB
8529 " " " BTBB
8555 same as :INPUT      G
8556 crusror gone keyboard entry is displayed butnot run if kp=run BTBB
8557 " " " " " " " " " " " " " BTBB
8559 same as :LIST        G
8560 crusror gone keyboard entry displayed but not run if kp =run BTBB
8561 " " " " " " " " " " " " BTBB
8562 " " " " " " " " " " " " BTBB
8563 " " " " " " " " " " " " BTBB
8564 " " " " " " " " " " " " BTBB
8565 " " " " " " " " " " " " BTBB
8566 " " " " " " " " " " " " BTBB
8574 same as :RUN        G
8577 " " " G
8592 crusror gone if kp  WBB
8821 puts line or lines on screen WBB use program
8822 " " " " " " " " " "
8823 " " " " " " " " " "
8824 " " " " " " " " " "
8825 " " " " " " " " " "
8826 " " " " " " " " " "
8841 " " " " " " " " " "
8842 " " " " " " " " " "
8843 " " " " " " " " " "
8844 " " " " " " " " " "
8845 " " " " " " " " " "
8846 " " " " " " " " " "
8847 " " " " " " " " " "
8848 " " " " " " " " " "
8849 " " " " " " " " " "
8851 " " " " " " " " " "
8852 " " " " " " " " " "
8853 " " " " " " " " " "

```

8940	line	WBB							
8942	"	WBB							
8960	"	WBB							
8965	"	WBB							
8966	"	WBB							
8967	"	WBB							
8971	"	WBB							
8978	how	BTBB							
9125	puts crusror at different position on screen								G
9139	" " " " " " " "								G
9140	" " " " " " " "								G
9141	" " " " " " " "								G
9142	" " " " " " " "								G
9145	" " " " " " " "								G
9146	" " " " " " " "								G
9199	crusror gone if kp reapears on next line								G
9218	change &(2)	G							
9220	collor flash	G							
9261	makes NT=0	G							
9265	" "	G							
9267	" "	G							
9268	" "	G							
9269	" "	G							
9270	" "	G							
9271	" "	G							
9272	makes NT=78	G							
9275	" "	G							
9276	" "	G							
9301	vertical lines &(9)disapears number display if kp	BTBB							
9302	" " " " " " "	BTBB							
9304	" " " " " " "	BTBB							
9305	" " " " " " "	BTBB							
9306	erase memory prints 1028 as line number	BTBB							
9307	" " " " "	BTBB							

9308	erase memory prints 1028 as line number	BTBB
9309	" " " " " "	BTBB
9310	erase memory	BTBB
9311	" "	BTBB
9312	" "	BTBB
9313	" "	BTBB
9314	" "	BTBB
9315	" "	BTBB
9316	" "	BTBB
9333	" "	BTBB
9352	" "	BTBB
9353	game over	LOCK
9369	like print	G
9379	crusor gone if kp=RUN	BTBB
9392	prints m waits for input but does not go to memory G	
9445	<u>interesting see note 1</u>	
9467	prints sorry	BTBB
9468	" "	BTBB
9469	" "	BTBB
9471	" "	BTBB
9472	" "	BTBB
9473	" "	BTBB
9564	like CLEAR	G
9567	puts crusor to top of screen	G
9569	" " " " " "	G
9570	" " " " " "	G
9571	" " " " " "	G
9573	" " " " " "	G
9574	" " " " " "	G
9575	" " " " " "	G
9576	" " " " " "	G
9577	" " " " " "	G
9578	" " " " " "	G
9582	prints HOW	BTBB
9592	prints WHAT 13?? BALLY BASIC	BTBB

```

9627  same as LIST      G
9657  interesting      WBB
9658  " "              WBB
9659  " "              WBB
9660  " "              WBB
9662  prints HOW       WBB
9667  interesting      WBB try adding things afterthe number
9668  " "              WBB " " " " "
9670  " "              WBB " " " " "
9671  " "              WBB " " " " "
9672  " "              WBB " " " " "
9673  " "              WBB " " " " "
9674  " "              WBB " " " " "
9675  " "              WBB " " " " "
9676  " "              WBB " " " " "
9677  " "              WBB " " " " "
9692  same as PRINT    G
9720  " " "            G
9724  crusror 1space from originalposition G
9726  " " " " " " " " G
9742  prints call number G
9744  same as PRINT    G
9745  " " "            G
9746  " " "            G
9747  prints HOW       BTBB
9873  interesting      BTBB
9930  " " "            WBB only with 10 INPUT A 20 CALL A
10026 waiting for input after input WBB
10027 " " " " " " " G
10034 prints a number then ???or other letters and words BTBB or WBB
10037 " " " " " " " " BTBB OR WBB
10067 prints caracters as abauve them waits for input input=NT WBB
10068 " " " " " " " WBB
10069 " " " " " " " WBB
10070 " " " " " " " WBB

```

10071	prints characters then waits for input	WBB
10072	waiting for input then crusror mouves to top left	BTBB
10073	" " " " " " "	WBB
10074	" " " " " " "	WBB
10075	" " " " " " "	WBB
10077	waiting for input*2 collor soundmemory	LOCK
10078	" " " 1 " " "	LOCK
10079	" " " " " " "	LOCK
10086	interesting enter numberand go watch screen press some keys	BTBB
10088	as abauve +collor +memory	BTBB
10089	" " " " "	BTBB
10097	sound	WBB
10100	prints n after input	WBB
10212	prints HOW	BTBB
10820	prints 1line	G
10856	prints 2lines	G
10924	prints WBB then a string of numbers if kp=go HOWBB if kp=run WBB	
10940	sound	G
11005	moves crusror	G
11011	prints WHAT 13?? BALLY BASIC	BTBB
11018	moves crusror	G
11019	" " " "	G
11020	" " " "	G
11021	" " " "	G
11022	" " " "	G
11029	waiting for inputpress some letter or number several times if kp=	
11034	prints called number	G go RESET BTBB
11035	" " " "	G
11036	" " " "	G
11037	" " " "	G
11038	interesting	LOCK
11039	prints -call number	G
11040	" " " "	G
11041	" " " "	G
11042	" " " "	G
11043	" " " "	G

11044	prints ?11043	G				
11045	prints ?11045	G				
11046	prints ?11046	G				
11095	waiting for input	WBB				
11096	prints 7949	WBB	whith	program	21307	WBB
11097	waiting for input	WBB				
11098	prints 177	WBB	with	program	21343	WBB
11099	" 78	WBB	"	"	" 21408	WBB
11100	" 92	WBB	"	"	" 21340	WBB
11101	" 3421	WBB	"	"	" 15197	WBB
11103	" -20129	WBB	"	"	" 24415	WBB
11104	" 20064	WBB	"	"	" -24480	WBB
11105	" 11105	WBB	"	"	" 11105	WBB
11106	" 11106	G	"	"	" 11106	G
11107	" 11107	G	"	"	" 11107	G
11108	" 11108	G	"	"	" 11108	G
11110	moves crursor	G				
11111	" " "	G				
11115	prints 1:30or 1:300000000	WBB	or	LOCK		
11135	" 1:30242424242424	LOCK				
11193	puts caracter on screen if	KP=GO	WBB	if	KP=RUN	BTBB
11194	" " " " " "					
11198	" " " " " "					
11199	" " " " " "					
11200	" " " " " "					
11201	" " " " " "					
11202	" " " " " "					
11203	" " " " " "					
11204	" " " " " "					
11206	" " " " " "					
11207	" " " " " "					
11210	" " " " " "					
11211	" " " " " "					
11217	" " " " " "					
11218	" " " " " "					



```

11553 moves cruser to different locations on screen G
11554 " " " " " " " " G
11555 " " " " " " " " G
11559 " " " " " " " " G
11594 " " " " " " " " G
11596 " " " " " " " " G
11597 " " " " " " " " G
11598 " " " " " " " " G
11599 " " " " " " " " G
11600 " " " " " " " " G
11601 " " " " " " " " G
11648 " " " " " " " " G
11650 " " " " " " " " G
11651 " " " " " " " " G
11652 " " " " " " " " G
11653 " " " " " " " " G
11723 waiting for input if KP BC=78 WBB
11724 " " " " " " WBB
11726 " " " " BC=36 LOCK
11727 " " " " " " RESET BTBB
11768 BC=78 G
11769 " " G
11771 " " G
11778 " " G
11807 prints 10 waiting for input. like pressing WORDS GO G
11808 " " " " " " " " " " G
11809 " " " " " " " " " " G
11810 interesting WBB
11836 tone delay for 2 seconds G
11850 print 1 line then print BALLY BASIC. like pressing RUN G
11860 " " " " " " " " " " G
11861 " " " " " " " " " " G
*****
11862 up to 32767 either shows nothing or part of calculator
      or game over or lock.

```

5048	large+small+regular	size letters+memory display	LOCK
5059	character	BTBB	
5060	" "	BTBB	
5065	large+small+regular	size letter+numbers+memory	LOCK
5066	" "	" " " " " " " "	LOCK
5067	" "	" " " " " " " "	LOCK
5100	" "	" " " " " " " "	LOCK
5111	" "	" " " " " " " "	LOCK
5120	" "	" " " " " " " "	LOCK
5148	character	BTBB	
5157	large letters+numbers	count backwards	LOCK
5158	" "	" " " " " " " "	LOCK
5159	" "	" " " " " " " "	LOCK
5160	" "	" " " " " " " "	LOCK
5161	" "	" " " " " " " "	LOCK
5162	" "	" " " " " " " "	LOCK
5163	" "	" " " " " " " "	LOCK
5164	" "	" " " " " " " "	LOCK
5165	" "	" " " " " " " "	LOCK
5166	" "	" " " " " " " "	LOCK
5167	" "	" " " " " " " "	LOCK
5168	" "	" " " " " " " "	LOCK
5169	" "	" " " " " " " "	LOCK
5170	" "	" " " " " " " "	LOCK
5172	same as above+horizontal	barrs use keyboard to controll	LOCK
5173	" "	" " " " " " " " " " " "	LOCK
5174	" "	" " " " " " " " " " " "	LOCK
5175	" "	" " " " " " " " " " " "	LOCK
5176	" "	" " " " " " " " " " " "	LOCK
5177	" "	" " " " " " " " " " " "	LOCK
5178	" "	" " " " " " " " " " " "	LOCK
5179	" "	" " " " " " " " " " " "	LOCK
(5240)	crash+crasy print WBB	without ( ) crash	LOCK
5241	" "	" " WBB	
5243	" "	" " WBB	
5248	" "	" " WBB	